

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-013174**Date Inspected:** 15-Apr-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Yang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Joe Alaniz was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

OBG Assembly Yard

8AE

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joints 004 located at CA048 bike path side of segment. Welder is identified as Mr. Yin Xiaokai (050232). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-2G (2F)-FCM-Repair-1 and CWR1225 repair procedure.

Y Location of repairs areas by above noted welder (050232) is located at 7070mm.

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joints 004 located at CA048 bike path side of segment. Welder is identified as Mr. Sun Lingling (048047). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-2G (2F)-FCM-Repair-1 and CWR1225 repair procedure.

Y Location of repairs areas by above noted welder (048047) is located at 14880mm.

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7AW+7BW

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 003 located at OBW7 deck plate of segment. Welder is identified as Mr. Yun Chuansheng (045221). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-1G (1F)-FCM-Repair-1 and CWR1402 repair procedure.

Y Location of repairs areas by above noted welder (045221) is located at 11180mm.

7AW+7BW

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 005 located at OBE7 bike path side of segment. Welder is identified as Mr. Du Hengyou (037743). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-3G (3F)-FCM-Repair-1 and WR12075 repair procedure.

7CE

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 004 located at CA039 cross beam side of segment. Welder is identified as Mr. Chen Renzhi (058087). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-1G (1F)-FCM-Repair-1 and CWR1227 R3 repair procedure.

Y Location of repairs areas by above noted welder (058087) is located at 6860~6940mm.

7BW

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 006 located at SEG035B cross beam of segment. Welder is identified as Mr. Zang Yanbo (045196). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2114-FCM-1.

7DE+7EE

Shield Metal Arc Welding (SMAW) welding was performed on weld joints 021, 022, 024 and 026 located at BP119-001 bottom plate of segment. Welder is identified as Mr. Liu Shuying (037998). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-T-2233-B-U2-F.

Shield Metal Arc Welding (SMAW) welding was performed on weld joints 020, 024, 022 and 026 located at BP173-001 bottom plate of segment. Welder is identified as Mr. Shi Yan (068920). ZPMC QC is identified as Wu Zhi Cheng. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-T-2233-B-U2-F.

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7CW+7BW

Shield Metal Arc Welding (SMAW) VT repair welding was performed on side plate t stiffeners located on cross beam side of segment. Welder is identified as Mr. Xu Zichuan (205098). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-2G (2F)-Repair-1.

Miscellaneous Work In Progress

QA Inspector observed ZPMC's personnel performing various job functions at Tail Assembly Yard. Locations and description of work are as followed:

8BW

1. Trimming the deck plate and side plate weld splice edge at panel point 67 using a mechanical guided torch.

7DW+7DE

1. Moved CB8 cross beam into plate between 7DW and 7DE.

NDT Observation

This QA Inspector observed ZPMC Magnetic Particle Testing (MT) Technician performed MT on various locations in the trial assembly yard. Locations and indications are as followed:

7AW+7BW

1. Side plate weld splice and temporary attachments on both sides of weld joint located on the cross beam side. (External)
2. Bottom plate weld splice and temporary attachments on both sides of weld joint. (External)

This QA Inspector observed ZPMC Ultra Sonic Testing (UT) Technician performed UT on various locations in the trial assembly yard. Locations are as followed:

7CE+7DE

1. Performed on the side plates (CB/BP side) and deck plate weld splice.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (150-0042-2372), who represents the Office of Structural Materials for your project.

Inspected By:	Alaniz,Joe	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer
